Math 8

Name:
Date:

Sec 5.6/5.7 – Equivalent Ratios and Comparing Ratios

1. **<u>Equivalent Ratios</u>**

   Equivalent ratios have the same value if we can _____ or _____ every term

   in the ratio by the _____ number.

   We can show this with the terms of the ratios in rows.

1						
1.5						

   We can show this with the terms of the ratios in columns.

   1 : 1.5

   :

   :

   :

   :

   :

   :

   A ratio will be in simplest form when its terms have _____ _____ _____.

Practice

In Ms. Lo's classes 60 people have the flu, 20 are recovering, and 12 are immune. Assuming that the rest of the school is equally susceptible to the flu, give 3 equivalent ratios of people with the flu, recovering and immune.

2. Comparing Ratios

Example – Ali Oop scored 10 free throws in 18 shots. Steve Nash scored 14 free throws and missed 10. Which player has the better free throw record?

There are 3 different strategies of showing thinking for this problem and to compare ratios:

1) Use equivalent <u>part-to-part</u> ratios to find <u>one common</u> term.

2) Use equivalent <u>part-to-whole</u> ratios to find <u>one common</u> term.

3) Compare using <u>unit</u> ratios - a ratio where one of the values is equal to _____

Practice

1) Show if the following ratios are equivalent:

    a) 16:30 and 28:42   b) 12:9 and 44:33

2) You are painting your room, and can't decide between two shades of green. Option A is made by mixing 5 cans of green paint with 3 cans of white paint. Option B is made by mixing 7 cans of green paint with 4 cans of white paint. Which option is the lighter shade of green? Choose one of the method from above to show your work.

3) You have 2 recipes for chocolate chip cookies. Recipe A has 12 cups of batter per 2 cups of chocolate chips. Recipe B has 30 cups of batter per 3 cups of chocolate chips. Which recipe will make more chocolaty cookies? Choose one of the method from above to show your work.